

REMARKS

Claims 1, 3-11, 13-18, 20-30, 32-35 and 41-47 are pending in the present application. Claim 45 has been amended and claims 46 and 47 have been added. Claims 1, 13, 18, 30, 41, 46 and 47 are the independent claims. No new matter is presented.

Regarding newly added independent claim 46, it is noted that claim 46 recites a copy protection method comprising, amongst other novel features, encrypting a first region of a text using a first encryption key, the first region of text including data to be extracted as a second encryption key; encrypting a second region of the text using the second encryption key; transmitting a cipher text comprising the encrypted first and second regions; transmitting the first encryption key, region segmentation information for segmenting the text into the first region and the second region, and information related to the second encryption key; decrypting the first region of the transmitted cipher text using the transmitted first encryption key and the transmitted region segmentation information; extracting the second encryption key from the decrypted first region using the transmitted information related to the second encryption key; and decrypting the second region of the transmitted cipher text using the extracted second encryption key.

Applicants respectfully assert that neither Orrin nor McGough, nor Applicants' Admitted Prior Art, whether taken singly or combined, teach or suggest these features of newly added independent claim 46.

Regarding newly added independent claim 47, it is noted that claim 47 recites a copy protection method comprising, amongst other novel features, encrypting a first region of a text, as a first encryption key, after a second encryption key is extracted from the first region of the text; encrypting a second region of the text using the second encryption key; transmitting a cipher text comprising the encrypted first and second regions; transmitting the first encryption key, region segmentation information for segmenting the text into the first region and the second region, and information related to the second encryption key; decrypting the first region of the transmitted cipher text using the transmitted first encryption key and the transmitted region segmentation information; extracting the second encryption key from the decrypted first region using the transmitted information related to the second encryption key; and decrypting the second region of the transmitted cipher text using the extracted second encryption key.

It is also asserted that neither Orrin nor McGough, nor Applicants' Admitted Prior Art, whether taken singly or combined, teach or suggest these features of newly added independent claim 46.

REQUEST FOR PERSONAL INTERVIEW

Applicants respectfully request that Examiner Pich contact the undersigned attorney to schedule a Personal Interview to address any remaining issues.

REJECTIONS UNDER 35 U.S.C. §101:

Claims 41 and 45 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding the rejection of independent claim 41, Applicants respectfully traverse this rejection for at least the following reason.

Independent claim 41 recites a receiver comprising, amongst other novel features, an authenticator to obtain a safe transmission path through which a first encryption key, region segmentation information, and information related to a second encryption key are received, and a decryptor to decrypt a portion of the encrypted text using the first encryption key and the region segmentation information, to extract the second encryption key from the decrypted portion using the information related to the second encryption key, and to decrypt another portion of the encrypted text using the second encryption key. There is no claimed feature in independent claim 41 which could be considered as non-statutory matter and therefore, Applicants respectfully assert that independent claim 41 is properly considered statutory subject matter within the meaning of 35 U.S.C. §101 and respectfully request that the rejection of independent claim 41 be withdrawn.

Regarding the rejection of dependent claim 45, Applicants have amended claim 45 to recite that the receiver comprises a hardware server.

Accordingly, Applicants respectfully assert that claim 45 is properly considered statutory subject matter within the meaning of 35 U.S.C. §101 and respectfully request that the rejection of independent claim 45 be withdrawn.

REJECTIONS UNDER 35 U.S.C. §103:

Claims 1, 3, 4, 7, 8, 10, 11, 16, 13, 18, 21, 24, 25, 27 and 30 are rejected under 35 U.S.C. §103(a) as being unpatentable over Orrin (U.S. Patent 6,011,849 hereafter Orrin).

Regarding the rejection of independent claim 1, it is noted that claim 1 recites a copy protection method to prevent unauthorized copying of digital data, comprising amongst other novel features, **encrypting a first region of a text containing a second encryption key using a first encryption key; and encrypting a second region of the text using the second encryption key.**

In other words, in the method recited in independent claim 1, a first region of a text containing a second encryption key is encrypted using a first encryption key and a second region of the text is encrypted using the second key.

The Examiner indicates, under the section "Response to Arguments," that the labels of what is the first encryption key and what is the second encryption key is arbitrary and does not matter. In other words the Examiner indicates that what applicant calls the first encryption key disclosed by Orrin reads on the second encryption key recited in applicant's claimed invention and what applicant calls the second encryption key disclosed by Orrin reads on the first encryption key recited in applicant's claimed invention (page 3, second paragraph of the Office Action mailed February 24, 2006).

The Examiner further indicates, under the rejection of the claims, that Orrin discloses encrypting a first region of a text containing second encryption key using a first encryption key and encrypting a second region of the text using the second encryption key. In particular, the Examiner relies on column 4, lines 10-15 and column 7, line 59 through column 8, line 8 of Orrin for such teachings.

Applicants respectfully assert that Orrin fails to teach or suggest the features recited in independent claim 1, notwithstanding the Examiner's comments to the contrary and regardless of the labeling of the keys.

Responsively, Applicants respectfully note that the reasoning of the Examiner appears to be incomplete for at least the following reason.

Even assuming that the labeling of the keys were arbitrary as noted by the Examiner, Orrin discloses encrypting data using a session key (first, second or third key) using either a recipient's public key (for transmission security) (first, second or third key), or a predetermined user local key (for storage security) (first, second or third key). Orrin further discloses adding a header to the message ciphertext containing the encrypted session key (any key) and other information necessary for decryption purposes. In other words, Orrin discloses an encryption method by which data is encrypted using a key, and thereafter encrypting this key using another key and adding a header to the encrypted data, the header having the encrypted key.

As noted above, independent claim 1 recites encrypting a **first region of a text containing a second encryption key using a first encryption key**; and **encrypting a second region of the text using the second encryption key**. In other words, the first region of text contains an encryption key and this first region is encrypted using another key.

Simply put, Orrin does not teach encrypting a first region of text containing a key using another key, Orrin simply discloses encrypting data using a key and then encrypting the key itself.

Accordingly, Applicants respectfully assert that the rejection of claim 1 under 35 U.S.C. § 103(a) should be withdrawn because Orrin fails to teach or suggest each feature of independent claim 1.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 3-4, 7-8, 10-11 and 16 under 35 U.S.C. § 103(a) should be withdrawn at least because of their dependence from claim 1 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 3-4, 7-8, 10-11 and 16 also distinguish over the prior art.

Regarding the rejection of independent claim 13, it is noted that claim 13 recites a copy protection method, comprising, amongst other novel features, **decrypting the first region of the cipher text using the transmitted first encryption key and the transmitted region segmentation information; extracting the second encryption key from the decrypted first region using the transmitted second encryption key information; and decrypting the second region of the text using the extracted second encryption key.**

The Examiner recognizes that Orrin fails to teach or suggest these novel features but indicates that these limitations are similar to the ones discussed in claim 1 as being obvious to Orrin's invention and are rejected for the same reason.

However, as noted above Orrin discloses an encryption method by which data is encrypted using a key, and thereafter encrypting this key using another key. Therefore, regardless of arbitrarily labeling the keys, Orrin performs a method by which data is encrypted using a key and thereafter encrypting this key using another key and fails to teach or suggest a method for decrypting cipher text as recited in independent claim 13.

Accordingly, Applicants respectfully assert that the rejection of claim 13 under 35 U.S.C. § 103(a) should be withdrawn because Orrin does not teach or suggest each feature of independent claim 13.

Regarding the rejection of independent claim 18, it is noted that claim 18 recites a computer readable medium encoded with processing instructions for implementing a method of encrypting a text, the method comprising, amongst other novel features, **encrypting a first region of the text using a first encryption key, where the first region contains a second encryption key; encrypting a second region of the text using the second encryption key; transmitting the first encryption key and region segmentation information for segmenting the text into the first region and the second region; decrypting the first region of the text using the first encryption key and the transmitted region segmentation information; extracting the second encryption key from the decrypted first region; and decrypting the second region of the text using the extracted second encryption key.**

As noted above, Orrin discloses an encryption method by which data is encrypted using a key, and thereafter encrypting this key using another key. Therefore, regardless of arbitrarily labeling the keys, Orrin performs a method different from independent claim 18.

Accordingly, Orrin fails to teach or suggest the features recited in independent claim 18, including **encrypting a first region of the text using a first encryption key; encrypting a second region of the text using the second encryption key; decrypting the first region of the text using the first encryption key** and the transmitted region segmentation information; **extracting the second encryption key from the decrypted first region; and decrypting the second region of the text using the extracted second encryption key.**

Accordingly, Applicants respectfully assert that the rejection of claim 18 under 35 U.S.C. § 103(a) should be withdrawn because Orrin does not teach or suggest each feature of independent claim 18.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 21, 24-25 and 27 under 35 U.S.C. § 103(a) should be withdrawn at least because of their dependence from claim 18 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 21, 24-25 and 27 also distinguish over the prior art.

Regarding the rejection of independent claim 30, it is noted that independent claim 30 recites a computer readable medium encoded with processing instructions for implementing a method of decrypting an encrypted text, the method comprising, amongst other novel features, **decrypting a first region of the encrypted text using a first encryption key**, where the first region contains a second encryption key; **decrypting a second region of the encrypted text using the second encryption key**; decrypting the first region using region segmentation information; and extracting the second encryption key from the decrypted first region using information related to the second encryption key.

As noted above, Orrin discloses an encryption method by which data is encrypted using a key, and thereafter encrypting this key using another key. Therefore, regardless of arbitrarily labeling the keys, Orrin performs a method different from independent claim 18.

Accordingly, Applicants respectfully assert that the rejection of claim 30 under 35 U.S.C. § 103(a) should be withdrawn because Orrin does not teach or suggest each feature of independent claim 30.

Claims 5, 17, 15, 20, 22, 28-29, 32-33, 35 and 41-45 are rejected under 35 U.S.C. §103(a) as being unpatentable over Orrin in view of applicant's admittance of prior art (hereafter AAPA).

Claims 5 and 17 depend from independent claim 1, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 1.

AAPA also fails to teach or fairly suggest the features recited in independent claim 1.

Accordingly, Applicants respectfully request that the rejection of dependent claims 5 and 17 under 35 U.S.C. §103(a) be withdrawn because neither Orrin nor AAPA, whether taken singly or combined, teach or suggest each of the features recited in independent claim 1 upon which claims 5 and 17 depend.

Claim 15 depends from independent claim 13, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 13.

AAPA also fails to teach or fairly suggest the features recited in independent claim 13.

Accordingly, Applicants respectfully request that the rejection of dependent claim 15 under 35 U.S.C. §103(a) be withdrawn because neither Orrin nor AAPA, whether taken singly or combined, teach or suggest each of the features recited in independent claim 13 upon which claim 15 depends.

Claims 20, 22 and 28-29 depend from independent claim 18, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 18.

AAPA also fails to teach or fairly suggest the features recited in independent claim 18.

Accordingly, Applicants respectfully request that the rejection of dependent claims 20, 22 and 28-29 under 35 U.S.C. §103(a) be withdrawn because neither Orrin nor AAPA, whether taken singly or combined, teach or suggest each of the features recited in independent claim 18 upon which claims 20, 22 and 28-29 depend.

Claims 32, 33 and 35 depend from independent claim 30, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 30.

AAPA also fails to teach or fairly suggest the features recited in independent claim 30.

Accordingly, Applicants respectfully request that the rejection of dependent claims 32-33 and 35 under 35 U.S.C. §103(a) be withdrawn because neither Orrin nor AAPA, whether taken singly or combined, teach or suggest each of the features recited in independent claim 30 upon which claims 32-33 and 35 depend.

Regarding the rejection of independent claim 41, it is noted that claim 41 recites a receiver for receiving encrypted text, comprising an authenticator to obtain a safe transmission path through which a first encryption key, region segmentation information, and information related to a second encryption key are received, and a decryptor to **decrypt a portion of the encrypted text using the first encryption key** and the region segmentation information, **to extract the second encryption key from the decrypted portion** using the information related to the second encryption key, and to decrypt another portion of the encrypted text using the second encryption key.

As noted above, Orrin discloses a method for encrypting data using a key and encrypting this key using another key. Orrin also discloses a decrypting method which is the equivalent of the encryption operation in reverse.

Accordingly, Orrin discloses a method which is different from Applicants method and therefore a receiver which is different from Orrin's receiver.

Therefore, Applicants respectfully request that the rejection of claim 41 under 35 U.S.C. §103(a) be withdrawn because neither Orrin nor AAPA, whether taken singly or combined, teach or suggest each of the features recited in independent claim 41.

Furthermore, Applicants respectfully assert that the rejection of dependent claims 42-45 under 35 U.S.C. § 103(a) should be withdrawn at least because of their dependence from claim 41 and the reasons set forth above, and because the dependent claims include additional features which are not taught or suggested by the prior art. Therefore, it is respectfully submitted that claims 42-45 also distinguish over the prior art.

Claims 6, 9, 14, 23, 26, and 34 are rejected under 35 U.S.C. §103(a) as being unpatentable over Orrin in view of McGough (U.S. Patent 6,445,797 hereafter McGough).

Claims 6 and 9 depend from independent claim 1, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 1.

McGough discloses a secure digital streaming system that employs SEMTS and the alphabet and key matrix representation of the related SEMS in a new series of simple mathematics and either hardware, firmware, or software processes that create an individual and unique, time-derived variable length Base 9 numeric message key; a key-based offset for the 6 bit segment alphabet resolution or a random number based ordering for the 6 bit alphabet resolution (column 3, lines 45-63).

McGough fails to teach or suggest a method to prevent unauthorized copying of digital data during digital data transmission between a sender and a receiver, comprising, amongst other novel features, **encrypting a first region of a text containing a second encryption key using a first encryption key; and encrypting a second region of the text using the second encryption key.**

Accordingly, Applicants respectfully assert that the rejection of claims 6 and 9 under 35 U.S.C. § 103(a) should be withdrawn because neither Orrin nor McGough, whether taken singly or combined, teach or suggest each feature of independent claim 1 upon which claims 6 and 9 depend.

Claim 14 depends from independent claim 13, and as noted above, Orrin fails to teach or suggest all the features recited in independent claim 13.

McGough fails to teach the features recited in independent claim 13 and thus fails to cure the deficiencies of Orrin.

Accordingly, Applicants respectfully assert that the rejection of claim 14 under 35 U.S.C. § 103(a) should be withdrawn because neither Orrin nor McGough, whether taken singly or combined, teach or suggest each feature of independent claim 13 upon which claim 14 depends.

Claims 23 and 26 depend from independent claim 18 and as noted above, Orrin fails to teach or suggest all the features recited in independent claim 18.

McGough fails to teach the features recited in independent claim 18 and thus fails to cure the deficiencies of Orrin.

Accordingly, Applicants respectfully assert that the rejection of claims 23 and 26 under 35 U.S.C. § 103(a) should be withdrawn because neither Orrin nor McGough, whether taken singly or combined, teach or suggest each feature of independent claim 18 upon which claims 23 and 26 depend.

Claim 34 depends from independent claim 30, and as noted above Orrin fails to teach or suggest all the features recited in independent claim 30.

McGough fails to teach the features recited in independent claim 30 and thus fails to cure the deficiencies of Orrin.

Accordingly, Applicants respectfully assert that the rejection of claim 34 under 35 U.S.C. § 103(a) should be withdrawn because neither Orrin nor McGough, whether taken singly or combined teach or suggest each feature of independent claim 30 upon which claim 34 depends.

CONCLUSION:

In accordance with the foregoing, it is respectfully submitted that all outstanding rejections have been overcome and/or rendered moot. And further, that all pending claims patentably distinguish over the prior art. There being no further outstanding rejections, the application is submitted as being in condition for allowance which action is earnestly solicited.

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If there are any additional fees associated with filing of this Preliminary Amendment, please charge the same to our Deposit Account No. 50-3333.

Respectfully submitted,

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